



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,363	09/12/2003	Michael S. DeFranks	SMCY-P01-101	6758
28120	7590	04/17/2009	EXAMINER	
ROPS & GRAY LLP			BONK, TERESA	
PATENT DOCKETING 39/41				
ONE INTERNATIONAL PLACE			ART UNIT	PAPER NUMBER
BOSTON, MA 02110-2624			3725	
			MAIL DATE	DELIVERY MODE
			04/17/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/661,363	DEFRANKS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	TERESA BONK	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 19 February 2009.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-3 and 5-83 is/are pending in the application.  
 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-3,5-11,17,28,33,34,51-53,59,64,65,70,75,76 and 81-83 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 23 February 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

Continuation of Disposition of Claims: Claims withdrawn from consideration are 12-16,18-21,24-27,29-32,35-50,54-58,60-63,66-69,71-74 and 77-80.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 19, 2009 has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5-11, 17, 28, 33, 34, 51-53, 59, 64, 65, 70, 75, 76, 81, and 82 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The subject matter not properly described in the specification is “rotate freely” and “free rotation” of the wire holder. The specification only discusses “the feeder spool assembly...allow(ing) for an additional degree of rotational freedom” on page 6-7, paragraph 0031-0032.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 5-11, 17, 28, 33, 34, 51-53, 59, 64, 65, 70, 75, 76, and 81-83 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 51, and 81-83, the limitations about "torque" are indefinite because there is no structure or limitations set forth in order to determine torque. Torque requires the rotational speed or the magnitude of force, either way these elements are absent from the claims and therefore it is indeterminate what the torque is.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-11, 51-53 and 83 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown (US Patent 3,478,408), newly cited, as best understood. Brown discloses an apparatus for manufacturing a coil spring from a wire, comprising a coil-spring winder (37) that forms the wire into a coil spring (13) having a plurality of turns; and a wire holder (28) that supplies the wire to the coil-spring winder along a feed direction, the wire holder supported by a low-friction

coupling (28 and 30) that allows the wire holder to rotate freely about a holding axis (Column2, lines 32-36 and Column 3, lines 50-55).

With regards to the limitations requiring “a wire comprising a plurality of strands twisted together” and claims 5-9, Brown’s apparatus would be capable of being used with the different types of wires. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

With regards to claim 2, Brown also discloses wherein the holding axis is essentially aligned with the feed direction (Figure 1).

With regards to claim 3, Brown also discloses wherein the rotation of the wire holder is synchronous with formation of the turns of the coil spring by the coil-spring winder (Column 2, lines 43-45).

With regards to claims 10 and 52, Brown also discloses wherein the wire holder further includes a reel (28) holding a supply of the wire, the reel being rotatable about a reel axis.

With regards to claims 11 and 53, Brown also discloses wherein the reel axis is essentially orthogonal to the feed direction (Figure 1).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17, 22, 23, 28, 59, 64, 65, 70, 81, and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Sticht et al. (US Patent 4,523,447), newly cited, as best understood. Brown discloses the invention substantially as claimed except for further including a motor for rotating the reel/wire holder about the reel/holding axis, and for dispensing the wire along the feed direction from the wire holder and further comprising a motor controller responsive to the longitudinal tension measured by the tension sensor and being operatively engaged with the motor for regulating speed or direction of rotation of the motor. Sticht is relied upon to teach a wire coiler device including a motor (88) for rotating the reel/wire holder (85) about the reel/holding axis, and for dispensing the wire along the feed direction from the reel/wire holder and further comprising a motor controller (90) responsive to the longitudinal tension measured by the tension sensor (91) and being operatively engaged with the motor for regulating speed or direction of rotation of the motor including periodically starting and stopping the supply of wire (Column 7, lines 59+ - Column 8, lines 1-22). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a motor and subsequent controller and sensor in Brown, who is silent on the assembly that rotates the spool 28, because combining prior art elements according to known methods yield predictable results.

Claims 33, 34, 75, and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Sticht and Otzen et al. (US Patent 5,865,051), previously presented, as best understood. The combination of Brown and Sticht discloses the invention substantially as claimed except for further comprising a torque sensor for measuring torque acting about a cross section of the wire and further comprising a motor controller responsive to the torque measured by the torque sensor. Otzen is relied upon to teach a wire coiler having a torque sensor (E1) for measuring torque acting about a cross section of the wire and further comprising a motor controller responsive to the torque measured by the torque sensor (Column 4, lines 24-30, 55+). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a torque sensor because combining prior art elements according to known methods yield predictable results.

***Response to Arguments***

Applicant's arguments with respect to claims 1-3, 5-11, 17, 28, 33, 34, 51-53, 59, 64, 65, 70, 75, 76, and 81-83 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERESA BONK whose telephone number is (571)272-1901. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on 571-272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dana Ross/  
Supervisory Patent Examiner, Art Unit 3725

Teresa M. Bonk  
Examiner  
Art Unit 3725